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Amendments to the Claims

1.–29. Canceled.

30. (currently amended): A method for delivering a pharmaceutically active agent to the respiratory tract of a patient in need of treatment comprising the steps of:

a. preparing a liquid carrier vehicle comprising:

i. from about 50% V/V to about 100% V/V water;

ii. from about 0% to about 40% V/V ethanol;

iii. from about 0% to about 30% V/V of a co-solvent;

iv. from about 0.5% to about 10% W/V of a pharmaceutically acceptable excipient; and

v. from about 0.05% W/V to about 10% W/V of a derivatized carbohydrate surfactant having low animal toxicity and immunogenicity;

wherein said liquid carrier vehicle has a resistivity of from about 25 ohm m to about 8000 ohm m and a surface tension of from about 20 dyne/cm to about 40 dyne/cm;

b. dissolving or suspending an effective amount of a pharmaceutically active agent in said liquid carrier vehicle to produce a solution or suspension;

c. producing an aerosol of said solution or suspension using an electrohydrodynamic spraying/aerosolization means; and

d. administering said aerosol to the pulmonary tract of said patient via inhalation of said aerosol.

31. (currently amended): The method according to claim 30 comprising the steps of:

a. preparing a liquid carrier vehicle comprising:

i. from about 70% V/V to about 100% V/V water;

ii. from about 0% to about 30% V/V ethanol;

iii. from about 2.5% to about 10% V/V of said co-solvent;

iv. from about 0.5% to about 10% W/V of said pharmaceutically acceptable excipient; and

v. from about 0.3% W/V to about 5% W/V of said derivatized carbohydrate surfactant;

wherein said liquid carrier vehicle has a resistivity of from about 100 ohm m to about 500 ohm m and a surface tension of from about 25 dyne/cm to about 30 dyne/cm;

b. dissolving or suspending an effective amount of said pharmaceutically active agent in said liquid carrier vehicle to produce a solution or suspension;

c. producing an aerosol of said solution or suspension using an electrohydrodynamic spraying/aerosolization means; and

d. administering said aerosol to the pulmonary tract of said patient via inhalation of said aerosol.

32. (currently amended): The method according to claim 30 comprising the steps of:

a. preparing a liquid carrier vehicle comprising:

i. from about 80% V/V to about 100% V/V water;

ii. from about 0% to about 20% V/V ethanol;

iii. from about 5.0% to about 10% V/V of said co-solvent;

iv. from about 0.5% to about 5% W/V of said pharmaceutically acceptable excipient; and

v. from about 0.3% W/V to about 5% W/V of said derivatized carbohydrate surfactant;

wherein said liquid carrier vehicle has a resistivity of from about 100 ohm m to about 500 ohm m and a surface tension of from about 25 dyne/cm to about 30 dyne/cm;

b. dissolving or suspending an effective amount of said pharmaceutically active agent in said liquid carrier vehicle to produce a solution or suspension;

c. producing an aerosol of said solution or suspension using an electrohydrodynamic spraying/aerosolization means; and

d. administering said aerosol to the pulmonary tract of said patient via inhalation of said aerosol.

33. (original): The method according to claim 30 wherein said carrier vehicle contains from about 70% V/V to about 100% V/V water.

34. (original): The method according to claim 30 wherein said pharmaceutically acceptable excipient is present in said liquid carrier vehicle at from about 0.5% W/V to about 5% W/V.

35. (original): The method according to claim 34 wherein said pharmaceutically acceptable excipient is 0.5% W/V polyvinyl pyrrolidone.

36. (original): The method according to claim 30 wherein said co-solvent is present in said liquid carrier vehicle at from about 2.5% V/V to about 10% V/V.

37. (original): The method according to claim 36 wherein said co-solvent is present in said liquid carrier vehicle at from about 2.5% V/V to about 5% V/V.

38. (currently amended): The method according to claim 30 wherein said co-solvent is selected from the group consisting of propylene glycol, glycerol, ~~and~~ polyethylene glycol, and mixtures thereof.

39. (original): The method according to claim 38 wherein said co-solvent is 5% V/V propylene glycol.

40. (currently amended): The method according to claim 30 wherein said pharmaceutically acceptable excipient is selected from the group consisting of antioxidants, antimicrobials, pH adjusting acids and bases, tonicity adjusting agents, ~~and~~ viscosity adjusting agents, and mixtures thereof.

41. (currently amended): The ~~liquid carrier vehicle~~ method according to claim 30 wherein said liquid carrier has resistivity of from about 100 ohm m to about 500 ohm m and a surface tension of from about 20 dyne/cm to about 30 dyne/cm.

42. (currently amended): The method according to claim 30 wherein said surfactant is selected from the group consisting of n-octyl-β-D-glucopyranoside, n-nonyl-β-D-glucopyranoside, decyl-β-D-glucopyranoside, n-dodecyl-β-D-glucopyranoside, [[and]] n-tetradecyl-β-D-maltopyranoside, and mixtures thereof.

43. (currently amended): The method according to claim 42 wherein said surfactant is present in said liquid carrier vehicle at from about 0.3% W/V to ~~from~~ about 5% W/V.